

# CITY OF NEWTON, MASSACHUSETTS

Department of Planning and Development Michael J. Kruse, Director

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Public Hearing Date:

July 15, 2008

Land Use Action Date:

September 9, 2008

Board of Aldermen Action Date: September 15, 2008 **Expiration Date:** 

October 13, 2008

DATE:

July 11, 2008

TO:

Board of Aldermen

FROM:

Michael Kruse, Director of Planning and Development

Candace Havens, Chief Planner

Jean Fulkerson, Principal Planner

SUBJECT:

#275-07(2) DENNIS & SVETLANA MIRVODA petition for a SPECIAL PERMIT/SITE PLAN APPROVAL to alter by more than three feet the existing contours of land for a retaining wall at 121 HARTMAN ROAD, NEWTON CENTRE, Ward 8, on land known as Sec 82, Blk 15, Lot 45, containing approx.

10,424 sf of land in a district zoned Single Residence 2.

CC:

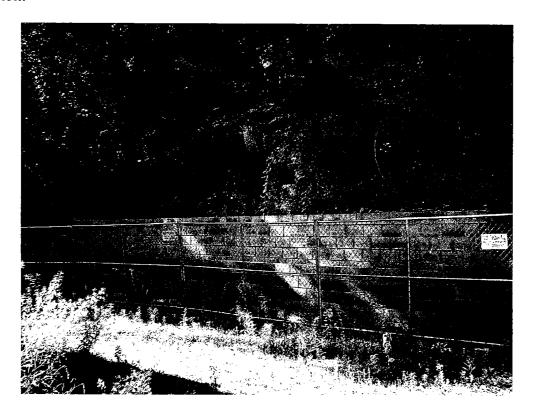
Mayor David B. Cohen

The purpose of this memorandum is to provide the Board of Aldermen and the public with technical information and planning analysis which may be useful in the special permit decision making process of the Board of Aldermen. The Planning Department's intention is to provide a balanced view of the issues with the information it has at the time of the public hearing. There may be other information presented at or after the public hearing that the Land Use Committee of the Board of Aldermen will consider in its discussion at a subsequent working session.

#### **EXECUTIVE SUMMARY**

The petitioners are seeking a special permit for a grade change of more than three (3) feet for a lot located at 121 Hartman Road in Oak Hill. A 1,500 sq.ft. single-family dwelling occupies the site. In November 2005, the City became aware of significant re-grading occurring at 121 Hartman Road without the benefit of city approvals or permits. The work involved a significant cut into a steep hillside, supported by a two-tiered retaining wall system. A "Stop Work" order was issued by the Commissioner of Inspectional Services because the retaining wall system was deemed unsafe and there was no previously-approved Board Order granting a special permit for this grade change of more than three (3) feet.

Following the issuance of the "Stop Work" order, the homeowners hired a professional engineer to re-design the retaining wall system to the satisfaction of the Associate City Engineer. An application for a special permit was filed in September 2007 and the item was heard at the October and November public hearings. The petition was withdrawn without prejudice in the fall of 2007 due to incomplete engineering information. The Associate City Engineer was asked to meet with the project engineer to ensure that all plans would be complete prior to a re-filing. The current site plans were pre-approved by the Associate City Engineer to avoid further delay during the hearing process and to ensure a safe and attractive wall at this site. The Associate City Engineer considers the existing condition to be a safety hazard that demands immediate resolution.



# I. SIGNIFICANT ISSUES FOR CONSIDERATION

In reviewing this petition, the Board should consider whether the alteration of the grade by more than three feet will have any adverse affects on the abutters and/or the character of this site in the context of the surrounding neighborhood.

# II. CHARACTERISTICS OF THE SITE AND NEIGHBORHOOD

#### A. Site

The subject property is located at 121 Hartman Road, Oak Hill, in Ward 8, on a lot of 10,424 square feet. The existing single-family dwelling was constructed in 1951 and is a modest post-war raised ranch style home of 1,500 square feet. The rear of the lot features a very steep hillside. The abutting property to the rear is significantly higher in grade and sits well above the subject property.

#### B. Neighborhood

The subject property is located within a large Single Residence 2 District. The homes on Hartman Road are modest, featuring many other split-level and ranch-style homes. Hartman Road, like much of Oak Hill, is undergoing change as more houses in the neighborhood are renovated with large additions. The southerly (odd-numbered) side of Hartman Road, where the subject property is located, backs up to a significant hillside and the abutting properties in the rear are substantially higher than those on Hartman Road.

#### III. DESCRIPTION AND ANALYSIS

The petitioners are requesting a special permit to alter the grade of the subject property by more than three feet in order to enlarge the usable rear yard portion of the lot. The change in grade occurred nearly two years ago. No topographic measurements were made prior to the grade change, so it is not possible to document the exact area of three-foot grade change, or the volume of earth that was removed from the site. A significant retaining wall is required to support the hillside extending behind the dwelling.

A chain link fence separates the area of the grade change and unfinished retaining walls from the rear yard of the property. Plans call for installation of a modular retaining wall and drainage system to ensure the petitioners' safety and that of the abutter immediately to the rear of the subject property. The unfinished retaining wall will remain in place, buried beneath the backfill and subsequent landscaping.

#### **Grade Change**

There is no documentation of previous topographic conditions at the site and, therefore, no way to measure the extent of the grade change or the number of trees that might have been removed. At this time, the excavation and unstable retaining wall are an eyesore and pose a potential safety hazard and should be removed and repaired as quickly as possible.

The retaining wall proposed by the petitioners is a modular system that holds back the weight of the hillside and is back-filled to meet the grade of the existing hillside. Engineering notes on the petitioners' plans show that the existing concrete block wall will remain in place, and only portions of the wall will be removed to just below grade. The concrete blocks creating the new retaining system will be visible once the wall is completed.

At its highest point the new retaining wall will be 6.5 feet high and will require a security/safety fence. The petitioners should provide details on the type of fence that will be used. Any fence must meet the requirements of the City's Fence Ordinance.

If the modular wall system is properly engineered, the grade change should not compromise the safety of the abutting properties or the existing trees that exist on the hillside at the rear of the property. The property owner at 115 Hartman Road (neighbor to the west) is concerned that any excavation does not damage a retaining wall that exists on her property line.

The greatest impact on the neighborhood will be from the appearance of the retaining wall, which is over 80 feet long and as much as 6.5 feet high in places. The surface of the modular block units will have the appearance of a split face, and according to the landscape plan English Ivy will be planted above the wall to help soften the appearance. Proper completion of the backfill and re-grading is crucial to maintaining existing trees and plant materials on the slope.

# Landscaping and Screening

The petitioners submitted a landscape plan, dated October 1, 2007, showing existing plantings on the subject property. The southwest side of the lot is already partially landscaped and additional arborvitae and other shrubs are proposed as infill.

The northwest side of the single-family dwelling is the access point for the heavy machinery that must be brought in to complete the work on the grade change and retaining wall. Three six-foot arborvitae will be planted at the completion of the wall project.

Between the subject property and the abutter at 115 Hartman Road there is an eight-foot high retaining wall topped by a three-foot privacy fence. The neighbors residing on this lot and the lot abutting the site to the rear should have no view of the proposed retaining wall.

All areas of backfill will be supported by anchored jute biodegradable netting installed with English spreading yews to further stabilize the slope. The netting will extend beyond the backfill and up the slope to protect the existing trees.

#### IV. TECHNICAL REVIEW

#### A. <u>Technical Considerations – Dimensional Controls and Parking</u>

The following table compares the existing conditions to the technical requirements in a Single Residence 2 District.

Single Residence 2	Required	Existing
Minimum lot size	10,000 sq. ft.	10,424 sq. ft.
Frontage	80 ft.	82 ft.
Setbacks		
Front	25 ft.	26.4 ft.
Side	7.5 ft.	7.6 ft.
Rear	15 ft.	59 ft.
Max. # of stories	2.5	1
Max. Floor Area Ratio	.30	.15
Max. Lot Coverage	30%	10.8 %
Min. Open Space	50%	86.1 %
Number of parking stalls	2	2

As shown in the table above, the existing single-family dwelling conforms to all dimensional requirements of the City's Zoning Ordinance. The Zoning Review Memorandum is attached (See Attachment "A").

## B. Engineering Review.

The Associate City Engineer has spent considerable time and effort assisting the project engineer to complete the proposed plans. Because of the hazardous situation created by work completed without benefit of any permit, the Associate City Engineer urges timely action on the proposal. He notes that it is critically important for the leveling pad to be compacted correctly and to be tested by a certified engineer (See Attachment "B").

#### V. **ZONING RELIEF BEING SOUGHT**

Based on the Chief Zoning Code Official's zoning review, dated June 28, 2007, the petitioners are seeking approval through:

- > Section 30-5(b)(4), to allow for the placement or removal of sod, loam, clay, gravel or stone, or other solid material, where the existing contours of the land are to be altered by more than three (3) feet;
- > Section 30-23 for Site Plan Approval; and
- > Section 30-24(d) for Approval of a Special Permit.

#### VI. PETITIONERS' RESPONSIBILITIES

The petitioners should provide information on the type of fencing that will be used along the top of the retaining wall.

The hazardous conditions at this site require that the petitioners act with haste to stabilize the hillside and complete construction of the retaining wall as quickly as possible.

#### **ATTACHMENTS:**

ATTACHMENTA: Zoning Review Memorandum, June 28, 2007

ATTACHMENT B: Associate City Engineer, Memorandum, June 10, 2008

ATTACHMENT C: Land Use Map
ATTACHMENT D: Zoning Map

# Zoning Review Memorand....

Dt: June 28, 2007

To: Dennis Mirvoda, owner

CC: John Lojek, Commissioner of Inspectional Services

Michael Kruse, Director, Department of Planning and evelopment

Fr: Juris Alksnitis, Chief Zoning Code Official

Re: Request for approval of grade change in excess of 3 feet.

Applicant(s): D. Mirvoda

Site: 121 Hartman Rd. SBL: Sect 82, Block 15, Lot 45

**Zoning:** Single Residence 2 **Lot Area:** 10,424 sq. ft.

Current use: SF dwelling Prop. use: Single family dwelling

## Background:

The subject lot is located within an existing subdivision with a building permit issued October 9, 1951 for the construction of the original dwelling. In 2005, the current owner was issued Building Permit #5110482 for a new addition and interior remodeling and in 2006 another Building Permit #6090258 to repair and replace a deck. However, the owner also performed extensive excavation along the hillside to the rear and initiated construction of a major tiered block retaining wall. The Inspectional Services Department (ISD) found it necessary on November 28, 2005 to issue several orders pertaining to the wall as follows: *Stop Work*; *Unsafe Structure*; and *Danger – Unsafe for Human Occupancy*. In the interim, various construction work has been allowed within the dwelling. In addition, ISD determined that the owner had altered the grade in excess of 3 ft., necessitating a special permit/site plan approval per Sections 30-5(b)(4) and 30-24 of the Zoning Ordinance. At this time, the owner seeks a Zoning Review in conjunction with the grade change and retaining wall.

#### Administrative determinations

- 1. Based on ISD records, the subject lot was created before December 7, 1953 and is subject to pre-1953 dimensional controls applicable to lots in the SR-2 zone. The following review is based on the materials and plans referenced under <u>Plans and Materials Reviewed</u>, below.
- 2. Section 30-15, Table 1, Density & Dimensional Controls in Residence Districts and for Residential Uses, sets forth the applicable density and dimensional controls for "old" lots in the SR-2 zone. The building shown on submitted plans meets the applicable controls referenced above.

3. Extensive retaining walls are proposed to the rear of the dwelling to hold the excavated hillside. The center portion of the proposed rear retaining wall rises approximately 7 ft. above grade, with wing sections on the east and west extending through the sideyard setbacks to the respective side lot lines. The owner indicates that an existing stone wall located along the side lot line on the west was built approximately in 2002.

The Commissioner of Inspectional Services, has determined that retaining walls which are an integral part of plans designed to handle grade changes in excess of 3 ft. may be addressed as part of the special permit process required for 3 ft. grade changes, and need not also to seek a variance from the Zoning Board of Appeals. Technical approval of plans provided to the City Engineer is required for the proposed retaining wall and various site and utility elements. Plans approved by the City Engineer should be provided not later than at the time of filing the petition with the Board of Aldermen. The Board of Aldermen may at its discretion approve, modify or disapprove the proposed 3 ft grade change and related retaining walls.

- 4. As shown on plan, an extended area at the rear of the house and along the westerly side will be excavated, thereby altering the grade in excess of 3 ft. This necessitates approval of a site plan and special permit by the Board of Aldermen per Section 30-5(b)(4) for the subject property. The owner indicates that as there was no previous survey establishing pre-existing topographical conditions, it is not possible to calculate the area affected.
- 5. While Section 30-23(b)(6) in conjunction with Section 30-24(a) requires the submittal of a landscape plan, the petitioner has not provided a landscape plan. In addition, the owner is responsible for complying with the Tree Preservation Ordinance. The applicant stated that as the proposed wall will be located closer to the rear of the house than the prior disapproved wall, no trees would be removed during construction. However, the owner needs to clarify whether any trees of significant caliper were removed as part of the initial excavation. The petitioner is responsible for providing a landscape plan and for complying with Sections 20-31 through 20-39, Tree Preservation Ordinance and obtaining approval of the Tree Warden.
- 6. Submitted plans indicate a stockade fence along the lot line on the west. In addition, another stockade fence is located on top of the existing stone retaining wall. Moreover, a substantial fence extension with open design has been added. The petitioner is responsible for providing sufficient information regarding the fence installations to ensure that these meet the requirements of *Section 20-40*, *Regulation of Perimeter Fences*.
- 7. See "Zoning Relief Summary" below.

	Zoning Relief Summary	
Ordinance	Action Re	equired
	Lot 4 (SBL82-15-45)	
	Building	
	N/A	N/A
	Site	
30-5(b)(4)	Approval to alter existing contours by more than three feet as shown on plan, including placement and treatment of retaining walls.	
30-23	Site plan approval, including landscaping.	
	Parking	
	N/A	N/A
	Special Permit	
30-24(d)	Approval of special permit for grade change.	X
	Variances	
30-27 ZBA	N/A	N/A

## Plans and materials reviewed:

- Plan set titled "121 Hartman Rd., Newton, Massachusetts", dated 8/20/06, last revised 4/9/07, prepared by RAV & Associates, Inc., P.O. Box 359, Canton, MA 02021, stamped and signed by Richard A. Volkin, Registered Professional Engineer, consisting of the following:
  - Dwg. No. S-1001 Site Plan
  - Dwg. No. S-1002 Details
- Plan set titled "121 Hartman Rd., Newton, Massachusetts", dated 8/20/06, prepared by RAV & Associates, Inc., P.O. Box 359, Canton, MA 02021, stamped and signed by Richard A. Volkin, Registered Professional Engineer, consisting of the following:
  - Dwg. 1 of 2 Retaining Wall Layout
  - Dwg. 2 of 2 Retaining Wall Typical Cross Sections
- Plan titled "Plan to Accompany Building Permit Application in Newton, Mass.", dated 2/17/07, prepared by Slaneyside Land Surveyors, Brighton, MA, stamped and signed by Stephen T. LaMonica, Professional Land Surveyor.
- Color photographs of site, dated 6/22/07, provided by Inspectional Services Department

# **CITY OF NEWTON**ENGINEERING DIVISION

#### **MEMORANDUM**

To: Alderman George Mansfield, Land Use Committee Chairman

From: John Daghlian, Associate City Engineer

Re: Special Permit – 121 Hartman Road Retaining Wall

Date: June 10, 2008

CC: Lou Taverna, PE City Engineer (via email)

Candice Havens, Chief Planner (via email)

Linda Finucane, Associate City Clerk (via email)

Jean Fulkerson, Planner (via email)

In reference to the above site, I have the following comments for a plan entitled:

Site Plan 121 Hartman Road Newton, MA Prepared by: RAV Associates Dated: 8/20/'06 Revised: 5/9/'08

## **Drainage**:

1. The drainage analysis appears to be correct for the City of Newton's 100-year storm event.

#### Wall Construction:

- 1. The revised site plan shows that the new proposed retaining wall has been pulled away from both abutters' properties and it appears that there should not be any negative impact. The contractor of record should however be careful during all phases of the construction so that no damage occurs to either abutter's property.
- 2. Based on the notes the existing concrete block walls will remain in place and only portions of the wall will be removed to just below grade, this is acceptable.

- 3. Based on a top of wall elevation of 112 feet as indicated, and a bottom of the wall at 105.5 feet based on cross-section #3, some sort of a safety/security fence will be needed. A detail of this safety fence or rail is needed and it shall conform to the requirements of the Inspectional Services Department.
- 4. Since the proposed wall is a structural retaining wall, and based upon the notes from the engineer of record, material for the leveling pad shall be compacted to 95% of the maximum proctor density (ASTM D698); this will require certified density testing by a professional engineer and certified reports shall be submitted to the Inspectional Services Department. This is a critical requirement for the safety of the wall.

#### General Conditions:

- 1. Inspections of the retaining wall shall be coordinated with the Inspectional Services Department.
- 2. All tree removal shall comply with the City's Tree Ordinance.
- 3. The contractor is responsible for contacting the Engineering Division [617-796-1020] and scheduling an appointment 48 hours prior to the date when the drainage system will be made available for an inspection. The drainage system shall be fully exposed for the inspector to view; backfilling shall only take place when the City's Inspector has given their approval.
- 4. The applicant will have to apply for Sidewalk Crossing Permit with the Department of Public Works prior to any construction.
- 5. The applicant will have to apply for a Building Permits with the Department of Inspectional Service prior to any construction.
- 6. Prior to Occupancy Permit being issued or upon completion of the proposed construction, an As-Built Plan shall be submitted to the Engineering Division in both digital format and in hard copy. The plan should show all utilities, walls and final grades.
- 7. If a Certificate of Occupancy is requested prior to all site work being completed, the applicant will be required to post a Certified Bank Check in the amount to cover the remaining work. The City Engineer shall determine the value of the uncompleted work.

If you have any questions or concerns please feel free to contact me @ 617-796-1023

# 121 Hartman Rd Land Use Map

Land Use

Street Rights-of-Way

Street Names

**Bulldings** 

Contours (10 Ft. Interval)

Vacant Land Golf Course Open Space Private Educational Nonprofit Organizations Public Housing

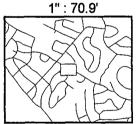
Single Family Residential

Commercial

Industrial Mixed Use

Property Boundaries

Address Numbers



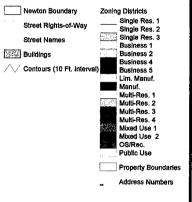
The Information on this map is from a digital data base accessed using the Newton Geographic Information (GiS). Newton cannot guarantee the securacy or information contained on this map. Each user of its responsible for determining its suitability for his reintended use or purpose. City departments vincessarily approve applications based solely or Applicants for City permits and icenses must inquite relevant city department for applicable require City staff cornect errors in these data as they are Newton's GIS Administrator maintains records referenced and applicants for careful control of the contr the source materials and methods used to create data and will disclose this information upon requi





ATTACHMENT C

# 121 Hartman Rd Zoning Map





The Information on this map is from a digital data base accessed using the Newton Geographic Information (GIS). Newton cannot guarantee the accuracy of information contained on this map. Each user of I is responsible for determining its suitability for his her Intended use or purpose. City departments whencessarily approve applications based solely on Applicants for city permits and licensee must linq the relevant city department for applicable require City staff correct errors in these data as they are Newton's GIS Administration maintains records rettee source materials and methods used to create the source materials and methods used to create data and will disclose this information upon regul

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ATTACHMENT D